

JUDGE KOELT

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

- - - - - x

UNITED STATES OF AMERICA : INDICTMENT

- v. -

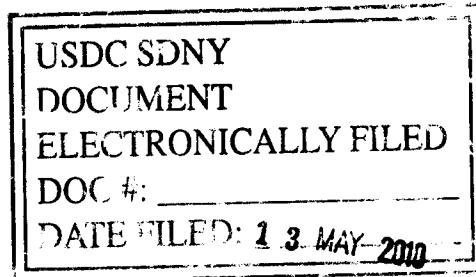
SAMARTH AGRAWAL, : 10 CRIM 417

Defendant. :  
- - - - - x

COUNT ONE

(Theft of Trade Secrets)

The Grand Jury charges:



Relevant Persons and Entities

1. At all times relevant to this Indictment, a financial institution (the "Financial Institution") was a company with offices in New York, New York that provided financial services around the world. The Financial Institution engaged in, among other financial activities, high-frequency trading in securities markets.

2. At all times relevant to this Indictment, an investment firm ("the Investment Firm") was a financial services firm with offices in New York, New York.

3. At all times relevant to this Indictment, SAMARTH AGRAWAL, the defendant, resided in New Jersey. From in or about March 2007 through on or about November 17, 2009, AGRAWAL was employed as a quantitative analyst, then as a trader, in the Financial Institution's High Frequency Trading Group. As a

trader, AGRAWAL was responsible for, among other things, adjusting the parameters of trading algorithms that were part of the computer code used by the Financial Institution to conduct high-frequency trading. On or about November 17, 2009, AGRAWAL resigned from the Financial Institution. In or about April 2010, AGRAWAL accepted an offer to work for the Investment Firm.

Background

A. High-Frequency Trading

4. High-frequency trading is a type of trading carried out in financial markets, such as the New York Stock Exchange and NASDAQ Stock Market, in which orders to buy and sell are placed electronically. Typically, high-frequency trading involves the extremely rapid execution of a high volume of trades in which the decisions to make those trades are determined by sophisticated computer programs that use complex mathematical formulas, known as algorithms, to make the trading decisions. Those algorithms, in turn, make trading decisions based upon, among other things, statistical analyses of past trades and moment-to-moment developments in the markets. Various financial institutions, including the Financial Institution, engage in high-frequency trading.

B. The Financial Institution's High-Frequency Trading Code

5. Over the past several years, the Financial Institution spent millions of dollars to develop and maintain a computer system that was used in high-frequency trading (the

"Trading System"). The Trading System is generally composed of a network of computers and computer code (the "Code"). The high-frequency trades made using the Trading System typically generate millions of dollars of profits per year for the Financial Institution.

6. At all times relevant to this Indictment, the Code was divided into distinct units, each of which executes different types of trades. Each unit of the Code was subdivided into modules that interact with each other. The modules were stored in files, the arrangement of which reveals important information about the operation of the Code.

C. The Financial Institution's Protections of the Trading System

7. At all times relevant to this Indictment, the Financial Institution had taken various measures to protect the Trading System and its Code and prevent its unauthorized copying, transfer, or removal, including the following measures, among others:

a. The Financial Institution limited access to the Code to a small number of employees whose jobs required such access;

b. Access to the Code was limited to only the particular units of the Code that fell within the employee's duties;

c. Computers assigned to employees who were granted access to the Code restricted the use of devices that

could be used to make portable copies of the Code; and

d. The Financial Institution monitored file

transfers outside of its computer network.

D. AGRAWAL's Involvement in the Financial Institution's Trading System

8. From in or about March 2007, up to and including in or about April 2009, SAMARTH AGRAWAL, the defendant, was employed by the Financial Institution as a quantitative analyst in its High Frequency Trading Group (the "Trading Group") in the Financial Institution's New York, New York offices. As a quantitative analyst, AGRAWAL was responsible for, among other things, conducting mathematical and statistical research, the results of which could be used by other members of the Trading Group to make adjustments to the algorithms contained in one of the Code's units ("Unit A"). As a quantitative analyst, AGRAWAL was not granted access to the Code.

9. In or about April 2009, SAMARTH AGRAWAL, the defendant, was promoted to the position of trader within the Trading Group. As a trader, AGRAWAL was responsible for, among other things, adjusting the parameters of Unit A's trading algorithms. Following the promotion, AGRAWAL's supervisors granted him access to Unit A, including its file structure.

E. AGRAWAL's Theft of the Financial Institution's High-Frequency Trading Computer Code

10. On or about Friday, June 12, 2009, an employee of the Financial Institution made a copy of Unit A and placed it

onto a shared hard drive on the Financial Institution's computer network in a folder with a file name that ended in "\_for\_samarth" (the "Folder"). That employee also copied a unit of the Code for which SAMARTH AGRAWAL, the defendant, had not been granted access ("Unit B"), as well as other pieces of the Code's programming, and placed that data into the Folder.

11. On or about Friday, June 12, 2009, SAMARTH AGRAWAL, the defendant, accessed the modules of the Code that had been placed in the Folder. AGRAWAL copied all of the modules of Unit B in the Folder and placed the copies into a folder on the personal network drive assigned to AGRAWAL. AGRAWAL created four Microsoft Word documents, which contained computer code for Unit A modules, as well as information about the organization of the modules and their file system structure.

12. On or about Saturday, June 13, 2009, SAMARTH AGRAWAL, the defendant, printed out the four Microsoft Word documents containing the Unit A computer code and the modules' file system structure.

13. On or about August 31, 2009, September 2, 2009, and September 11, 2009, SAMARTH AGRAWAL, the defendant, accessed Unit B modules in the folder on AGRAWAL's personal network drive; created Microsoft Word documents, containing, among other things, Unit B computer code; and printed those documents.

14. On or about November 12, 2009, SAMARTH AGRAWAL, the defendant, deleted the contents of the folder containing Code

on AGRAWAL's personal network drive.

15. In or about April 2010, printouts of the Code were recovered from a desk in the bedroom of the apartment of SAMARTH AGRAWAL, the defendant, in Jersey City, New Jersey.

F. AGRAWAL Ends His Employment at the Investment Firm

16. From on or about November 13, 2009, through on or about November 16, 2009, SAMARTH AGRAWAL, the defendant, was absent from the Financial Institution's New York, New York offices. On or about November 17, 2009, AGRAWAL submitted a letter of resignation to his supervisor. Pursuant to the terms of AGRAWAL's employment contract, AGRAWAL remained on the payroll of the Financial Institution but no longer reported for work and was prohibited from working for a new employer up through and including on or about March 17, 2010.

17. Starting in or about mid-2009, SAMARTH AGRAWAL, the defendant, had been in employment negotiations with the Investment Firm. AGRAWAL was scheduled to accept formally an offer of employment at the Investment Firm's offices on or about April 19, 2010. AGRAWAL had been offered a base salary, a signing bonus, and a guaranteed first year bonus, for a total of hundreds of thousands of dollars.

18. Prior to accepting the offer, SAMARTH AGRAWAL, the defendant, had met with employees of the Investment Firm to discuss the details of a trading system AGRAWAL intended to develop at the Investment Firm. AGRAWAL had provided handwritten

notes to employees of the Investment Firm that related to the trading system AGRAWAL was proposing to develop. Those handwritten notes described, among other things, features of the Financial Institution's Code and features of the system architecture of the Trading System.

Statutory Allegations

19. From at least on or about June 12, 2009, up through and including in or about April 2010, in the Southern District of New York and elsewhere, SAMARTH AGRAWAL, the defendant, unlawfully, willfully, and knowingly, without authorization copied, duplicated, sketched, drew, photographed, downloaded, uploaded, altered, destroyed, photocopied, replicated, transmitted, delivered, sent, mailed, communicated, and conveyed a trade secret, as that term is defined in Title 18, United States Code, Section 1839(3), with intent to convert such trade secret, that was related to and included in a product that was produced for and placed in interstate and foreign commerce, to the economic benefit of someone other than the owner thereof, and intending and knowing that the offense would injure the owner of that trade secret, to wit, AGRAWAL, while in New York, New York, without authorization copied, printed and removed from the offices of the Financial Institution proprietary computer code for the Financial Institution's high frequency trading business, with the intent to use that code for the economic benefit of

himself and others.

(Title 18, United States Code, Sections 1832(a)(2),  
1832(a)(4), and 2).

COUNT TWO

(Transportation of Stolen Property in  
Interstate and Foreign Commerce)

The Grand Jury further charges:

20. The allegations in paragraphs 1 through 18 of this Indictment are repeated and realleged as though fully set forth herein.

21. From at least on or about June 12, 2009, up through and including in or about April 2010, in the Southern District of New York and elsewhere, SAMARTH AGRAWAL, the defendant, unlawfully, willfully, and knowingly, transported, transmitted, and transferred in interstate and foreign commerce goods, wares, merchandise, securities, and money, of the value of \$5,000 and more, knowing the same to have been stolen, converted and taken by fraud, to wit, AGRAWAL, while in New York, New York, without authorization, removed from the offices of the Financial Institution proprietary computer code for the Financial Institution's high frequency trading business, the value of which exceeded \$5,000, and brought that stolen code to his home in Jersey City, New Jersey.

(Title 18, United States Code, Sections 2314 and 2.)

James M. Huntley  
FOREPERSON

Preet Bharara  
PREET BHARARA  
United States Attorney  
JSK

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UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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UNITED STATES OF AMERICA

- v. -

**SAMARTH AGRAWAL,**

**Defendant.**

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**INDICTMENT**

10 Cr.

(18 U.S.C. §§ 1832(a)(2),  
1832(a)(4), 2314, and 2.)

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**PREET BHARARA**  
United States Attorney.

A TRUE BILL

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J. Marshall Wilcox  
Foreperson.

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May 13, 2010

Indictment filed.

Case assigned to Judge Koeltl  
Freeman, USM